

“Tanaka et al.”). Applicants respectfully traverse the rejection in view of the clarifying revision to Claim 3.

Claim 3, as amended, is directed to an image pickup device having a color filter array arranged in horizontal and vertical directions, and pixels including photoelectric converting elements arranged in the horizontal and vertical directions, respectively corresponding to the color filters. Vertical read-out units read out signals from the pixels arranged in the vertical direction. A horizontal read-out unit reads out sequentially the signals from the vertical read-out units in the horizontal direction. An output unit outputs sequentially the signals from the horizontal read-out unit. Claim 3 further recites a control unit that divides the pixels on a unit basis of a predetermined number of first and second lines, and adds the signals of pixels of the first and second lines to generate different kinds of color difference signals and to control so as to generate one kind of color difference signal from every predetermined number of lines.

An advantage of a device constructed according to Claim 3 is that the number of pixels in the image display unit in the vertical direction can be less than the number of pixels of the image pickup element in the vertical direction (see page 14, lines 17-26). Another advantage is that it is possible to dispense with the image memory or vertical thinning out means for synchronizing the image pickup element with the display unit (see page 32, lines 13-26).

*Tanaka et al.* relates to the control of read-out of pixel lines on a four-line basis. According to Equations 1 and 2, which describe a conventional line sequential color difference signal method, two lines of the four lines are read out to generate a color difference signal R-Y, and the other two lines of the four lines are read out to generate a

color difference signal B-Y (see page 479, and Fig. 1). *Tanaka et al.*'s field sequential color difference signal method discloses that pixel lines are also read out on a four-line basis to generate one kind of color difference signal in each field. *Tanaka et al.* at Figure 3 reveals that in the first field the color difference signal R-Y is generated from each group of four lines, while in the second field the color difference signal B-Y is generated from each group of four lines.

The Office Action at section 1 argues that *Tanaka et al.* at Figure 1 discloses "...control means ... where the control unit is arranged to divide the plurality of pixels on a unit basis of a predetermined number of lines which includes a plurality of first lines and to add the signals of pixels of the plurality of second lines in order to control pixels of the predetermined number of lines so as to generate one kind of color difference signal."

(emphasis added). In fact, however, *Tanaka et al.*'s line sequential color difference signal method does not disclose one kind of color difference signal, but rather discloses two kinds of color difference signals that are generated from each group of four lines, which includes the first two lines and the second two lines (see Equations 1 and 2, and Fig. 1). In addition, *Tanaka et al.*'s field sequential color difference signal method does not disclose different kinds of color difference signals, but rather discloses the same color difference-signals. (see Equations 3-6, and Fig. 3). In summary, nothing has been found in *Tanaka et al.* that teaches a control unit that generates different kinds of color difference signals, and control so as to generate one kind of color difference signal from every predetermined number of lines, as recited in amended Claim 3.

Applicants maintain that because *Tanaka et al.* does not teach all of the claim limitations of Claim 3, *Tanaka et al.* does not anticipate Claim 3, or the claims dependent therefrom. Therefore, Applicants request withdrawal of the rejection.

Claims 19, 21, 23, 25, 29, 31 and 33 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Tanaka et al.* in view of U.S. Patent No. 5,907,355 (Kotaki).

*Kotaki* relates to a solid-state image pickup device that reduces the number of signal processing stages required to convert a solid-state image sensor to a video signal (see col. 2, lines 35-37). Nothing has been found in *Kotaki* that teaches or suggests the feature of Claim 3 discussed above, and thus does not teach or suggest the limitations of Claims 19, 21, 23, 25, 27 and 29, which depend upon Claim 3. Accordingly, Applicants respectfully submit that *Tanaka et al.* and *Kotaki* does not teach or suggest this feature of Claim 3

A review of the other art of record has failed to reveal anything which, in Applicants' opinion, would remedy the deficiencies of the art discussed above, as references against Claim 3. Claim 3 is therefore believed patentable over the art of record.

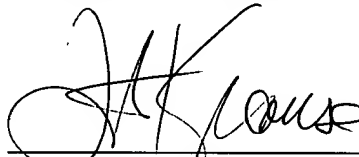
Claims 19, 21, 23, 25, 29, 31 and 33 are each dependent from Claim 3, and are therefore believed patentable for the same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, however, the individual reconsideration of the patentability of each on its own merits is respectfully requested.

Applicants respectfully request favorable consideration and early passage to issue of the present divisional application.

In view of the foregoing amendments and remarks, Applicants respectfully request favorable reconsideration and early passage to issue of the present application.

Applicants' undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our below listed address.

Respectfully submitted,



Attorney for Applicants

Registration No. 24613

FITZPATRICK, CELLA, HARPER & SCINTO  
30 Rockefeller Plaza  
New York, New York 10112-3801  
Facsimile: (212) 218-2200